REMARKS

The Official Action mailed March 4, 2003, has been received and its contents carefully noted. Accordingly, the Applicants respectfully submit that this response is being timely filed.

The Applicants note with appreciation the consideration of the Information Disclosure Statement filed on April 2, 2001.

Claims 1, 2, 15, 16 and 21-31 are now pending in the present application, of which claims 1, 2 and 21-24 are independent. Claims 1, 2 and 21-24 have been amended to better recite the features of the present invention and to correct minor matters of form. For the reasons set forth in detail below, all claims are believed to be in condition for allowance.

The present invention recited as in claim 1 is directed to a liquid crystal display device having a plurality of thin film transistors, at least one of the thin film transistors comprising an active layer over an insulating surface, a gate insulating film over the active layer, a gate electrode over the gate insulating film, and two wirings connected to the active layer. Edge portions of the active layer and a part of an edge portion of the two wirings are aligned, and the gate insulating film is in contact with the two wirings and not in contact with the edge portions of the active layer.

The Official Action rejects claims 22-24 under 35 U.S.C. 112, first paragraph, asserting that the claims contain subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Specifically, the Official Action asserts that the phrases "the insulating film is in contact with the insulating surface" in claims 22 and 23 and "the second insulating film in contact with the insulating surface" in claim 24 are not supported by the specification and thus are deemed to be new matter. The Applicants respectfully disagree.

In response, the Applicants have amended claims 22 and 23 to recite that "the second insulating film is in contact with the insulating surface." The Applicants respectfully submit that this feature of claims 22-24 is supported by Embodiment 1 and Figs. 5A-7D of the specification. The insulating surface recited in claims 22-24 corresponds with a surface of a base film 501 (Fig. 5A) made of an insulating film

including silicon (p. 9, lines 5-6). The second insulating film recited in claims 22-24 corresponds with a passivation film 560 formed of a silicon nitride film, a silicon oxide film or a silicon nitride oxide film (p. 16, lines 8-9). As shown in Fig. 7D, the second insulating film of the present invention may be formed in contact with the insulating surface. The amendment is merely clarifying in nature, and should not in any way affect the scope of protection afforded the claims for infringement purposes, particularly under the Doctrine of Equivalents. The Applicants respectfully submit that claims 22-24 are definite as amended. Accordingly, reconsideration and withdrawal of the rejection under 35 U.S.C. § 112 is in order and respectfully requested.

The Official Action rejects claims 22, 23, 26, 27, 29 and 30 under 35 U.S.C. 112, second paragraph. In response, as noted above, independent claims 22 and 23 have been amended to recite that "the second insulating film is in contact with the insulating surface." The Applicants respectfully submit that claims 22, 23, 26, 27, 29 and 30 are definite as amended. Accordingly, reconsideration and withdrawal of the rejection under 35 U.S.C. § 112 is in order and respectfully requested.

The Official Action rejects claims 1, 2, 15, 16 and 21 as anticipated by either U.S. Patent No. 5,981,974 to Makita or U.S. Patent No. 5,583,369 to Yamazaki et al. The Applicants respectfully submit that an anticipation rejection cannot be maintained against the independent claims of the present invention, as amended. Either Makita or Yamazaki '369 does not teach all the elements of the independent claims, either explicitly or inherently. Independent claims 1, 2 and 21-24 have been amended to recite a feature that "the gate insulating film is in contact with the two wirings and not in contact with the edge portions of the active layer." This feature is supported in the specification, for example, at Fig. 7D. For example, gate insulating film 530 (see Fig. 6B) is in contact with the two wirings 552 and 556 (see Fig. 7A) and not in contact with the edge portions of the active layer (see Fig. 7D), i.e. not in contact with the portion of the active layer aligned with wirings 552 and 556 on the left and right side of TFT 567. The same is true of TFTs 566 and 568.

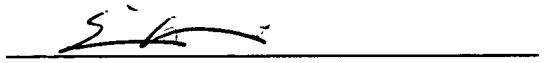
In contrast, it appears that both Yamazaki '369 and Makita disclose a gate insulating film in contact with wirings but also in contact with edge portions of an active layer. In Fig. 2E of Yamazaki '369, the gate oxide film 207 is in contact with the edge portions of the active layer including 210, 211. In Fig. 12F of Makita, the same is true of

gate insulating film 509 with respect to the edge portions of the active layer including 514n, 515n, 514p, 515p. Since either Makita or Yamazaki '369 does not teach all the elements of the independent claims, either explicitly or inherently, an anticipation rejection cannot be maintained. Accordingly, reconsideration and withdrawal of the rejection under 35 U.S.C. § 102(b) is in order and respectfully requested.

The Official Action rejects claims 1, 2, 15, 16 and 21-31 as anticipated by U.S. Patent No. 5,990,542 to Yamazaki. Yamazaki '542 also does not teach all the elements of the independent claims, either explicitly or inherently. Although it appears that Fig. 5F of Yamazaki '542 discloses that a gate insulating film 512, 513 is not in contact with edge portions of an active layer, the gate insulating film 512, 513 is not in contact with wirings 525-527. Since Yamazaki '542 does not teach all the elements of the independent claims, either explicitly or inherently, an anticipation rejection cannot be maintained. Accordingly, reconsideration and withdrawal of the rejection under 35 U.S.C. § 102(b) is in order and respectfully requested.

Should the Examiner believe that anything further would be desirable to place this application in better condition for allowance, the Examiner is invited to contact the Applicants' undersigned attorney at the telephone number listed below.

Respectfully submitted,



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VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE CLAIMS:

Please amend claims 1, 2 and 21-24 as follows:

1. (Amended) A liquid crystal display device having a plurality of thin film transistors, at least one of said thin film transistors comprising:

an active layer over an insulating surface;

a gate insulating film over said active layer;

a gate electrode over said gate insulating film; and

two wirings connected to said active layer[, each of said wirings electrically connecting one of said plurality of thin film transistors],

wherein edge portions of said active layer and a part of an edge portion of said two wirings are aligned, and

[wherein the gate insulating film is not in contact with the insulating surface.]

wherein the gate insulating film is in contact with the two wirings and not in contact with the edge portions of the active layer.

2. (Amended) A liquid crystal display device having a plurality of thin film transistors, at least one of said thin film transistors comprising:

an active layer having [a] source and drain regions over an insulating surface;

a gate insulating film over said active layer;

a gate electrode over said gate insulating film; and

two wirings connected to said source and drain regions[, each of said wirings electrically connecting one of said plurality of thin film transistors],

wherein edge portions of said active layer and a part of an edge portion of said two wirings are aligned, and

[wherein the gate insulating film is not in contact with the insulating surface.]

wherein the gate insulating film is in contact with the two wirings and not in contact with the edge portions of the active layer.

21. (Amended) A liquid crystal display device having a plurality of thin film transistors, at least one of said thin film transistors comprising:

an active layer over an insulating surface;

a gate insulating film over said active layer;

a gate electrode over said gate insulating film; and

two wirings connected to said active layer[, each of said wirings electrically connecting one of said plurality of thin film transistors],

wherein a part of an edge portion of at least one of two wirings is aligned with at least one edge portion of the active layer, and

[wherein the gate insulating film is not in contact with the insulating surface.]

wherein the gate insulating film is in contact with the two wirings and not in contact with the at least one edge portion of the active layer.

22. (Amended) A semiconductor device comprising:

at least one thin film transistor comprising:

an active layer over an insulating surface;

a gate insulating film over the active layer; and

a gate electrode over the gate insulating film,

a first insulating film over the thin film transistor;

first and second wirings connected to the active region through contact holes in the first insulating film,

a second insulating film over the first insulating film;

wherein a part of an edge portion of at least one of [two] first and second wirings is aligned with at least one edge portion of the active layer, [and]

wherein the gate insulating film is in contact with the first and second wirings and not in contact with the at least one edge portion of the active layer, and

wherein the second insulating film is in contact with the insulating surface.

23. (Amended) A semiconductor device comprising:

at least one thin film transistor comprising:

an active layer over an insulating surface;

a gate insulating film over the active layer; and

a gate electrode over the gate insulating film,

a first insulating film over the thin film transistor;

first and second wirings connected to the active region through contact holes in the first insulating film,

a second insulating film over the first insulating film;

wherein a part of an edge portion of one of the first and second wirings is aligned with an edge of the active layer, [and]

wherein the gate insulating film is in contact with the first and second wirings and not in contact with the edge of the active layer, and

wherein the second insulating film is in contact with the insulating surface.

24. (Amended) A semiconductor device comprising:

at least one thin film transistor comprising:

an active layer over an insulating surface;

a gate insulating film over the active layer; and

a gate electrode over the gate insulating film,

a first insulating film over the thin film transistor;

first and second wirings connected to the active region through contact holes in the first insulating film,

a second insulating film over the first insulating film;

wherein a part of an edge portion of the first wiring is aligned with one of edge portions of the active layer, and a part of an edge portion of the second wiring is aligned with another one of the edge portions of the active layer, [and]

wherein the gate insulating film is in contact with the first and second wirings and not in contact with the edge portions of the active layer, and

wherein the second insulating film is in contact with the insulating surface.